

Title (en)  
CHECK VALVE

Title (de)  
RÜCKSCHLAGVENTIL

Title (fr)  
CLAPET ANTI-RETOUR

Publication  
**EP 3193055 A1 20170719 (EN)**

Application  
**EP 16461503 A 20160115**

Priority  
EP 16461503 A 20160115

Abstract (en)

A check valve (2) comprises a valve housing (4) defining an unobstructed valve opening (6) and a pair of flapper elements (12) each having a proximal end (18) and a distal end (20). The flapper elements (12) are pivotally mounted to the valve housing (4) at opposed sides of the valve opening (6) at their proximal ends (18) for pivotal movement between a closed position, in which together they block the flow of fluid through the valve opening (6) and an open position in which they permit the flow of fluid through the valve opening (6). The valve further includes a bumper element (40) arranged at the proximal end (18) of each flapper element (12) for engagement with the valve housing (4) when in the open position for limiting the angle of rotation of each flapper element (12).

IPC 8 full level  
**F16K 15/03** (2006.01)

CPC (source: EP US)  
**F16K 15/035** (2013.01 - EP US); **F16K 27/0227** (2013.01 - US)

Citation (search report)

- [X] US 2003089404 A1 20030515 - BODNAR BRUCE A [US]
- [Y] DE 202007017181 U1 20080228 - NORMA GERMANY GMBH [DE]
- [A] EP 1312763 A1 20030521 - GEN ELECTRIC [US]
- [Y] US 6240957 B1 20010605 - HATTORI TOSHIO [JP]
- [A] US 195137 A 18770911
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- [A] GB 356317 A 19310910 - LEROY MOODY LEWIS
- [A] US 479801 A 18920802
- [A] JP 2010270839 A 20101202 - KOWA KOGYO, et al
- [A] JP H0243571 U 19900326

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)

**EP 3193055 A1 20170719; EP 3193055 B1 20200506; US 10344882 B2 20190709; US 2017204985 A1 20170720**

DOCDB simple family (application)

**EP 16461503 A 20160115; US 201715405593 A 20170113**